

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for automatically tracking the rerouting of logical circuit data in a data network, the method comprising:

generating current reroute statistics upon the rerouting of logical circuit data from one or more failed logical circuits to one or more logical failover circuits in the data network, the current reroute statistics including trap data received for the one or more failed logical circuits in the data network;

generating a table for presenting the current reroute statistics without manual intervention;

generating updated rerouted statistics, the updated reroute statistics including updated trap data received for the one or more failed logical circuits in the data network; and

updating the table with the updated reroute statistics without manual intervention

wherein the current reroute statistics comprise trap data generated in “real-time” and communicated to a logical element module and not stored in switches that generated the trap data, and

wherein each of the one or more failed logical circuits and each of the one or more logical failover circuits in the data network is identified by a logical circuit identifier that is renamed until the one or more failed logical circuits has been restored.

2. (Original) The method of claim 1 further comprising generating a billing report including the updated reroute statistics.

3. (Original) The method of claim 1, wherein the updated reroute statistics are generated upon the restoration of the one or more failed logical circuits in the data network.

4. (Canceled)

5. (Currently Amended) The method of claim 1 [[4]], wherein the trap data comprises the logical identifier for each of the one or more failed logical circuits and the logical identifier for each of the one or more logical failover circuits.

6. (Currently Amended) The method of claim 1 [[4]], wherein the trap data comprises a current utilization of each of the one or more logical failover circuits.

7. (Currently Amended) The method of claim 1 [[4]], wherein the trap data comprises the number of hops taken by each of the one or more logical failover circuits.

8. (Currently Amended) The method of claim 1 [[4]], wherein the trap data comprises a quality of service parameter for each of the one or more logical failover circuits.

9. (Original) The method of claim 8, wherein the quality of service parameter comprises at least one of:

- an unspecified bit rate;
- a variable bit rate; and
- a committed bit rate.

10. (Currently Amended) The method of claim 1 [[4]], wherein the logical circuit identifier is a data link connection identifier (DLCI).

11. (Currently Amended) The method of claim 1 [[4]], wherein the logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).

12. (Original) The method of claim 1, wherein at least one of the one or more logical circuits is a permanent virtual circuit.

13. (Original) The method of claim 1, wherein at least one of the one or more logical failover circuits is a permanent virtual circuit.

14. (Original) The method of claim 1, wherein at least one of the one or more logical circuits is a switched virtual circuit.

15. (Original) The method of claim 1, wherein at least one of the one or more logical failover circuits is a switched virtual circuit.

16. (Original) The method of claim 1, wherein the data network is a frame relay network.

17. (Original) The method of claim 1, wherein the data network is an asynchronous transfer mode (ATM) network.

18. (Currently Amended) A system for automatically tracking the rerouting of logical circuit data in a data network, the system comprising:

at least one network device for rerouting logical circuit data between one or more failed logical circuits to one or more logical failover circuits in the data network, wherein each of the one or more failed logical circuits and each of the one or more logical failover circuits in the data network is identified by a logical circuit identifier that is renamed when the until the one or more failed logical circuits has been restored;

a logical element module, in communication with the at least one network device, for receiving trap data generated by the at least one network device, wherein receiving the trap data generated by the at least one network device comprises receiving the trap data in “real-time”; and

a network management module, in communication with the logical element module, for:

generating current reroute statistics upon the rerouting of logical circuit data from the one or more failed logical circuits to the one or more logical failover circuits, the current reroute statistics including the trap data received by the logical element module;

generating a table for presenting the current reroute statistics without manual intervention;

generating updated reroute statistics, the updated reroute statistics including the trap data received from the logical element module; and

updating the table with the updated reroute statistics without manual intervention.

19. (Original) The system of claim 18 wherein the network management module is further operative to generate a billing report including the updated trap data.

20. (Original) The system of claim 18, wherein the updated trap data is generated upon the restoration of the one or more failed logical circuits in the data network.

21. (Canceled)

22. (Currently Amended) The system of claim 18 [[21]], wherein the trap data comprises the logical identifier for each of the one or more failed logical circuits and the logical identifier for each of the one or more logical failover circuits.

23. (Currently Amended) The system of claim 18 [[21]], wherein the trap data comprises a current utilization of each of the one or more logical failover circuits.

24. (Currently Amended) The system of claim 18 [[21]], wherein the trap data comprises the number of hops taken by each of the one or more logical failover circuits.

25. (Currently Amended) The system of claim 18 [[21]], wherein the trap data comprises a quality of service parameter for each of the one or more logical failover circuits.

26. (Original) The system of claim 25, wherein the quality of service parameter comprises at least one of:

- an unspecified bit rate;
- a variable bit rate; and
- a committed bit rate.

27. (Currently Amended) The system of claim 18 [[21]], wherein the logical circuit identifier is a data link connection identifier (DLCI).

28. (Currently Amended) The system of claim 18 [[21]], wherein the logical circuit identifier is a virtual path/virtual circuit identifier (VPI/VCI).